Contents Vol. 66, 1997

Neuro
-endocrinology

No. 1

1 **Editor's Note**

Growth Hormone and Insulin-Like Growth Factors

2 **Gene Expression of Hypothalamic Somatostatin and Growth Hormone-Releasing Hormone in Dexamethasone-Treated Rats**
Lam, K.S.L.; Srivastava, G. (Hong Kong)

9 **Antiserum to Growth Hormone Decreases Sleep in the Rat**
Obál, F., Jr. (Szeged/Memphis, Tenn.); Bodosi, B.; Szilágyi, A. (Szeged); Kacsóh, B. (Macon, Ga.); Krueger, J.M. (Memphis, Tenn.)

17 **Expression of Insulin-Like Growth Factor Binding Protein-2 during Postnatal Development of the Rat Neurointermediate Pituitary**
Zhou, X. (Bozeman, Mont.); Herman, J.P. (Lexington, Ky.); Paden, Ch.M. (Bozeman, Mont.)

Reproductive Neuroendocrinology

28 **Convergence of Substance P and Estrogen Receptor Immunoreactivity in the Midbrain Central Gray of Female Guinea Pigs**
Turcotte, J.C.; Blaustein, J.D. (Amherst, Mass.)

38 **Relaxin-Induced Expression of Fos in the Forebrain of the Late Pregnant Rat**
Heine, P.A.; Di, S.; Ross, L.R.; Anderson, L.L.; Jacobson, C.D. (Ames, Iowa)

Neuroimmunology

47 **Effect of Continuous Intravenous Injection of Interleukin-6 and Pretreatment with Cyclooxygenase Inhibitor on Brain c-fos Expression in the Rat**
Niimi, M.; Wada, Y.; Sato, M.; Takahara, J.; Kawanishi, K. (Kagawa)

54 **Dose Effects of Recombinant Human Interleukin-6 on Pituitary Hormone Secretion and Energy Expenditure**
Tsigos, C. (Bethesda, Md./Athens); Papanicolaou, D.A.; Defensor, R.; Mitsiadis, C.S. (Bethesda, Md.); Kyrou, I. (Athens); Chrousos, G.P. (Bethesda, Md.)

27 **Announcement**

No. 2

Rapid Communication

63 **Distribution of Estrogen Receptor-β-Like Immunoreactivity in Rat Forebrain**
Li, X. (Charlottesville, Va.); Schwartz, P.E. (Golden, Colo.); Rissman, E.F. (Charlottesville, Va.)

Corticotropin, Proopiomelanocortin and Adrenal Gland

68 **Histamine and Prostaglandin Interaction in the Central Regulation of ACTH Secretion**
Anthonisen, M.; Knigge, U.; Kjær, A.; Warberg, J. (Copenhagen)

75 **Central Administration of the Neurotensin Receptor Antagonist, SR48692, Modulates Diurnal and Stress-Related Hypothalamic-Pituitary-Adrenal Activity**
Rowe, W.B. (Montreal); Nicot, A. (Paris); Sharma, S. (Montreal); Gully, D. (Toulouse); Walker, C.-D. (Montreal); Rostène, W.H. (Paris); Meaney, M.J.; Quirion, R. (Montreal)

86 **Glucocorticoids Inhibit Stress-Induced Phosphorylation of CREB in Corticotropin-Releasing Hormone Neurons of the Hypothalamic Paraventricular Nucleus**
Légrádi, G.; Holzer, D. (Boston, Mass.); Kapcala, L.P. (Baltimore, Md.); Lechan, R.M. (Boston, Mass.)

98 **Effect of Cholinergic Blockade on Glucocorticoid Regulation of NPY and Catecholamines in the Rat Adrenal Gland**
Laborie, C.; Bernet, F.; Dutriez-Casteloot, I.; Lesage, J.; Dupouy, J.P. (Villeneuve d'Ascq)

106 **Sauvagine and TRH Differentially Stimulate Proopiomelanocortin Biosynthesis in the *Xenopus laevis* Intermediate Pituitary**
Dotman, C.H.; Maia, A.; Jenks, B.G.; Roubos, E.W. (Nijmegen)

Hypothalamic Regulation of Gonadotropins

114 **Dual Effect of Electrochemical Stimulation of the Medial Preoptic Area on the Release of LH: Possible Neurotransmitter Involvement**
Taleisnik, S.; Haymal, B. (Córdoba)

122 **Expression of Glutamate Receptor Subunit mRNAs in Gonadotropin-Releasing Hormone Neurons during the Sexual Maturation of the Female Rat**
Eyigor, O.; Jennes, L. (Lexington, Ky.)

Hypothalamic Regulation of Autonomous Functions

130 **Vasopressin Acts in the Subfornical Organ to Decrease Blood Pressure**
Smith, P.M.; Ferguson, A.V. (Kingston, Ont.)

136 **N^G-Methyl-*L*-Arginine, an Inhibitor of Nitric Oxide Synthase, Affects the Central Nervous System to Produce Peripheral Hyperglycemia in Conscious Rats**
Uemura, K.; Tamagawa, T.; Chen, Y.; Maeda, N.; Yoshioka, S.; Itoh, K.; Miura, H.; Iguchi, A.; Hotta, N. (Nagoya)

121 **Announcement**

KARGER

© 1997 S. Karger AG, Basel

E-Mail karger@karger.ch
Fax+ 41 61 306 12 34
http://www.karger.ch

The list of contents is available at:
http://www.karger.ch/journals/nen/nencont.htm

Contents Vol. 66, 1997

Neuro
-endocrinology

No. 1

1 **Editor's Note**

Growth Hormone and Insulin-Like Growth Factors

2 **Gene Expression of Hypothalamic Somatostatin and Growth Hormone-Releasing Hormone in Dexamethasone-Treated Rats**
Lam, K.S.L.; Srivastava, G. (Hong Kong)

9 **Antiserum to Growth Hormone Decreases Sleep in the Rat**
Obál, F., Jr. (Szeged/Memphis, Tenn.); Bodosi, B.; Szilágyi, A. (Szeged); Kacsóh, B. (Macon, Ga.); Krueger, J.M. (Memphis, Tenn.)

17 **Expression of Insulin-Like Growth Factor Binding Protein-2 during Postnatal Development of the Rat Neurointermediate Pituitary**
Zhou, X. (Bozeman, Mont.); Herman, J.P. (Lexington, Ky.); Paden, Ch.M. (Bozeman, Mont.)

Reproductive Neuroendocrinology

28 **Convergence of Substance P and Estrogen Receptor Immunoreactivity in the Midbrain Central Gray of Female Guinea Pigs**
Turcotte, J.C.; Blaustein, J.D. (Amherst, Mass.)

38 **Relaxin-Induced Expression of Fos in the Forebrain of the Late Pregnant Rat**
Heine, P.A.; Di, S.; Ross, L.R.; Anderson, L.L.; Jacobson, C.D. (Ames, Iowa)

Neuroimmunology

47 **Effect of Continuous Intravenous Injection of Interleukin-6 and Pretreatment with Cyclooxygenase Inhibitor on Brain c-fos Expression in the Rat**
Niimi, M.; Wada, Y.; Sato, M.; Takahara, J.; Kawanishi, K. (Kagawa)

54 **Dose Effects of Recombinant Human Interleukin-6 on Pituitary Hormone Secretion and Energy Expenditure**
Tsigos, C. (Bethesda, Md./Athens); Papanicolaou, D.A.; Defensor, R.; Mitsiadis, C.S. (Bethesda, Md.); Kyrou, I. (Athens); Chrousos, G.P. (Bethesda, Md.)

27 **Announcement**

No. 2

Rapid Communication

63 **Distribution of Estrogen Receptor-β-Like Immunoreactivity in Rat Forebrain**
Li, X. (Charlottesville, Va.); Schwartz, P.E. (Golden, Colo.); Rissman, E.F. (Charlottesville, Va.)

Corticotropin, Proopiomelanocortin and Adrenal Gland

68 **Histamine and Prostaglandin Interaction in the Central Regulation of ACTH Secretion**
Anthonisen, M.; Knigge, U.; Kjær, A.; Warberg, J. (Copenhagen)

75 **Central Administration of the Neurotensin Receptor Antagonist, SR48692, Modulates Diurnal and Stress-Related Hypothalamic-Pituitary-Adrenal Activity**
Rowe, W.B. (Montreal); Nicot, A. (Paris); Sharma, S. (Montreal); Gully, D. (Toulouse); Walker, C.-D. (Montreal); Rostène, W.H. (Paris); Meaney, M.J.; Quirion, R. (Montreal)

86 **Glucocorticoids Inhibit Stress-Induced Phosphorylation of CREB in Corticotropin-Releasing Hormone Neurons of the Hypothalamic Paraventricular Nucleus**
Légrádi, G.; Holzer, D. (Boston, Mass.); Kapcala, L.P. (Baltimore, Md.); Lechan, R.M. (Boston, Mass.)

98 **Effect of Cholinergic Blockade on Glucocorticoid Regulation of NPY and Catecholamines in the Rat Adrenal Gland**
Laborie, C.; Bernet, F.; Dutriez-Casteloot, I.; Lesage, J.; Dupouy, J.P. (Villeneuve d'Ascq)

106 **Sauvagine and TRH Differentially Stimulate Proopiomelanocortin Biosynthesis in the *Xenopus laevis* Intermediate Pituitary**
Dotman, C.H.; Maia, A.; Jenks, B.G.; Roubos, E.W. (Nijmegen)

Hypothalamic Regulation of Gonadotropins

114 **Dual Effect of Electrochemical Stimulation of the Medial Preoptic Area on the Release of LH: Possible Neurotransmitter Involvement**
Taleisnik, S.; Haymal, B. (Córdoba)

122 **Expression of Glutamate Receptor Subunit mRNAs in Gonadotropin-Releasing Hormone Neurons during the Sexual Maturation of the Female Rat**
Eyigor, O.; Jennes, L. (Lexington, Ky.)

Hypothalamic Regulation of Autonomous Functions

130 **Vasopressin Acts in the Subfornical Organ to Decrease Blood Pressure**
Smith, P.M.; Ferguson, A.V. (Kingston, Ont.)

136 **N^G-Methyl-*L*-Arginine, an Inhibitor of Nitric Oxide Synthase, Affects the Central Nervous System to Produce Peripheral Hyperglycemia in Conscious Rats**
Uemura, K.; Tamagawa, T.; Chen, Y.; Maeda, N.; Yoshioka, S.; Itoh, K.; Miura, H.; Iguchi, A.; Hotta, N. (Nagoya)

121 **Announcement**

KARGER

© 1997 S. Karger AG, Basel

E-Mail karger@karger.ch
Fax+ 41 61 306 12 34
http://www.karger.ch

The list of contents is available at:
http://www.karger.ch/journals/nen/nencont.htm

No. 3

Rapid Communication

145 **Localization of Leptin Receptor in the Human Brain**
Couce, M.E.; Burguera, B.; Parisi, J.E.; Jensen, M.D.; Lloyd, R.V. (Rochester, Minn.)

Mapping and Regulation of Hypothalamic Neurons

151 **Immunoreactive Prolactin Forms Colocalize with Vasopressin in Neurons of the Hypothalamic Paraventricular and Supraoptic Nuclei**
Mejía, S.; Morales, M.A.; Zetina, Ma.E.; Martínez de la Escalera, G.; Clapp, C. (Querétaro)

160 **Semiquantitative Distribution of Galanin-Receptor (GAL-R1) mRNA-Containing Cells in the Male Rat Hypothalamus**
Mitchell, V. (Lille); Habert-Ortoli, E. (Vitry); Epelbaum, J. (Paris); Aubert, J.P.; Beauvillain, J.C. (Lille)

173 **Transient Sex Differences of Aromatase (CYP19) mRNA Expression in the Developing Rat Brain**
Lauber, M.E.; Sarasin, A.; Lichtensteiger, W. (Zürich)

181 **Interactive Effects of Tamoxifen and Estrogen upon the Nigrostriatal Dopaminergic System**
McDermott, J.L. (Akron/Rootstown, Ohio); Anderson, L.I.; Dluzen, D.E. (Rootstown, Ohio)

188 **Attenuation of the Growth Hormone Secretagogue Induction of Fos Protein in the Rat Arcuate Nucleus by Central Somatostatin Action**
Dickson, S.L. (Cambridge); Viltart, O. (Villeneuve d'Ascq); Bailey, A.R.T.; Leng, G. (Edinburgh)

195 **Responses of Melanin-Concentrating Hormone mRNA to Salt Water Challenge in the Rainbow Trout**
Francis, K.; Suzuki, M.; Baker, B.I. (Bath)

203 **Correlation of Glioma Cell Regression with Inhibition of Insulin-Like Growth Factor 1 and Insulin-Like Growth Factor-Binding Protein-2 Expression**
Wang, Z.-H.; Ma, J.; Zeng, B.-J.; Catanese, V.M.; Samuels, S.; Gama Sosa, M.A.; Kolodny, E.H. (New York, N.Y.)

Adrenocorticotropic Regulation

212 **Endocrine Profile and Neuroendocrine Challenge Tests in Transgenic Mice Expressing Antisense RNA against the Glucocorticoid Receptor**
Barden, N. (Ste-Foy); Stec, I.S.M.; Montkowski, A.; Holsboer, F.; Reul, J.M.H.M. (Munich)

221 **Characterization of the Effect of *Mycoplasma fermentans* on the Hypothalamo-Pituitary-Adrenal Axis**
Wohlman, A.; Gallily, R.; Yirmiya, R.; Weidenfeld, J. (Jerusalem)

229 **Effect of the Serotonin 5-HT$_4$ Receptor Agonist Cisapride on Aldosterone Secretion in Corticotropic Insufficiency and Primary Hyperaldosteronism**
Lefebvre, H.; Dhib, M.; Godin, M. (Rouen); Contesse, V.; Delarue, C. (Mont-Saint-Aignan); Rieu, M. (Paris); Wolf, L.-M. (Rouen); Vaudry, H. (Mont-Saint-Aignan); Kuhn, J.-M. (Rouen)

Obituary

234 **Alfredo Donoso (1933–1997)**

No. 4

Gonadotropin Regulation

235 **Inhibition of M-Type K^+ and N-Type Ca^{2+} Channels by the Human Gonadotropin-Releasing-Hormone Receptor Heterologously Expressed in Adult Neurons**
Lewis, D.L.; Ikeda, S.R. (Augusta, Ga.)

246 **Regulation of Gonadotropin-Releasing Hormone and Luteinizing Hormone Secretion by AMPA Receptors.** Evidence for a Physiological Role of AMPA Receptors in the Steroid-Induced Luteinizing Hormone Surge
Ping, L.; Mahesh, V.B.; Bhat, G.K.; Brann, D.W. (Augusta, Ga.)

254 **Stimulatory Effect of Melanin-Concentrating Hormone on Luteinising Hormone Release**
Gonzalez, M.I. (London); Baker, B.I. (Bath); Wilson, C.A. (London)

263 **Luteinising Hormone Secretion from the Perifused Ovine Pars tuberalis and Pars distalis: Effects of Gonadotropin-Releasing Hormone and Melatonin**
Skinner, D.C.; Robinson, J.E. (Cambridge)

Growth Hormone Regulation

271 **Modulation by Galanin of Growth Hormone and Gonadotropin Secretion from Perifused Pituitary and Median Eminence of Prepubertal Male Calves**
Baratta, M.; Saleri, R. (Parma); Mascadri, C. (Brescia); Coy, D.H. (New Orleans, Ala.); Negro-Vilar, A. (Philadelphia, Pa.); Tamanini, C. (Parma); Giustina, A. (Brescia)

278 **Prolonged Oral Treatment with MK-677, a Novel Growth Hormone Secretagogue, Improves Sleep Quality in Man**
Copinschi, G. (Brussels); Leproult, R. (Chicago, Ill.); Van Onderbergen, A.; Caufriez, A. (Brussels); Cole, K.Y.; Schilling, L.M. (Chicago, Ill.); Mendel, C.M.; De Lepeleire, I.; Bolognese, J.A. (Rahway, N.Y.); Van Cauter, E. (Chicago, Ill.)

Corticotropin Regulation

287 **Increased Vasopressinergic Activity as a Possible Compensatory Mechanism for a Normal Hypothalamic-Pituitary-Adrenal Axis Response to Stress in BALB/c Nude Mice**
Spinedi, E. (La Plata/Lausanne); Hadid, R.; Gaillard, R.C. (Lausanne)

294 **Distribution and Expression of Glucocorticoid Receptor mRNA in the Forebrain of the Rainbow Trout**
Teitsma, C.A.; Bailhache, T.; Tujague, M. (Rennes); Balment, R.J. (Manchester); Ducouret, B.; Kah, O. (Rennes)

No. 5

Gonadotropins and Prolactin

305 **Pulsatile Secretion of Gonadotropin-Releasing Hormone by Rat Hypothalamic Explants without Cell Bodies of GnRH Neurons**
Purnelle, G.; Gérard, A.; Czajkowski, V.; Bourguignon, J.P. (Liège)

313 **Atrial Natriuretic Peptide Exhibits a Negative Modulation on the Stimulatory Effects of Angiotensin II on Tuberoinfundibular Dopaminergic Neuronal Activity.** Neurochemical and Electrophysiological Studies
Yen, S.-H.; Pan, J.-T. (Taipei)

321 **Reproductive Experience Reduces Haloperidol-Induced Prolactin Secretion in Female Rats**
Bridges, R.S.; Henriquez, B.M.; Sturgis, J.D.; Mann, P.E. (North Grafton, Mass.)

Pituitary Adrenal Axis

327 **Functional Activation of CRH Neurons and Expression of the Genes Encoding CRH and Its Receptors in Food-Deprived Lean *(Fa/?)* and Obese *(fa/fa)* Zucker Rats**
Timofeeva, E.; Richard, D. (Québec, Qué.)

341 **Enhanced Endocrine Response to Novel Environment Stress and Endotoxin in Lurcher Mutant Mice**
Frederic, F. (Paris); Chautard, T. (Marseille); Brochard, R. (Paris); Chianale, C. (Villejuif); Wollman, E. (Paris); Oliver, C. (Marseille); Delhaye-Bouchaud, N.; Mariani, J. (Paris)

348 **Effect of Adrenalectomy in Kindled Rats**
Karst, H. (Amsterdam/Leiden); Bosma, A.; Hendriksen, E.; Kamphuis, W. (Amsterdam); de Kloet, E.R. (Leiden); Joëls, M. (Amsterdam)

Melatonin and Pineal Gland

360 **Natural and Melatonin-Stimulated Changes in the Circadian Rhythm of Prolactin Secretion in the Ewe during Seasonal Anestrus**
Misztal, T.; Romanowicz, K.; Barcikowski, B. (Jabłonna)

368 **Circannual Somatostatin Gene and Somatostatin Receptor Gene Expression in the Early Post-Natal Rat Pineal Gland**
Mato, E. (Barcelona); Santisteban, P.; Chowen, J.A. (Madrid); Fornas, O.; Bouwens, M.; Puig-Domingo, M. (Barcelona); Argente, J. (Madrid); Webb, S. (Barcelona)

No. 6

Rapid Communication

375 **Influence of Endogenous Leptin Tone on the Estrous Cycle and Luteinizing Hormone Pulsatility in Female Rats**
Carro, E. (Santiago de Compostela); Pinilla, L. (Cordoba); Seoane, L.M. (Santiago de Compostela); Considine, R.V. (Indianapolis, Ind.); Aguilar, E. (Cordoba); Casanueva, F.F.; Dieguez, C. (Santiago de Compostela)

Neuroanatomy and Regulation of Hypothalamic Neurons

378 **Kappa-Opioid Restraint of Oxytocin Secretion: Plasticity through Pregnancy**
Leng, G. (Edinburgh); Dye, S.; Bicknell, R.J. (Cambridge)

384 **Comparison of Serotonin Receptor Numbers and Activity in Specific Hypothalamic Areas of Sexually Active and Inactive Female Rats**
Gonzalez, M.I. (London); Greengrass, P.; Russell, M. (Sandwich); Wilson, C.A. (London)

393 **Subtypes Y1 and Y2 of the Neuropeptide Y Receptor Are Respectively Expressed in Pro-Opiomelanocortin- and Neuropeptide-Y-Containing Neurons of the Rat Hypothalamic Arcuate Nucleus**
Broberger, C.; Landry, M. (Stockholm); Wong, H.; Walsh, J.N. (Los Angeles, Calif.); Hökfelt, T. (Stockholm)

Angiotensin and Angiotensin Receptors

409 **Dissociated Adult Rat Subfornical Organ Neurons Maintain Membrane Properties and Angiotensin Responsiveness for up to 6 Days**
Ferguson, A.V. (Kingston); Bicknell, R.J.; Carew, M.A.; Mason, W.T. (Cambridge)

416 **Expression of Angiotensin II Receptor Subtypes AT_{1A} and AT_{1B} in Enriched Fractions of Dispersed Rat Pituitary Cells**
Moreau, C.; Rasolojanahary, R.; Zamora, A.J.; Enjalbert, A. (Marseille); Kordon, C.; Llorens-Cortes, C. (Paris)

Clinical Neuroendocrinology

426 **Nitric Oxide Modulates in vivo and in vitro Growth Hormone Release in Acromegaly**
Cuttica, C.M.; Giusti, M.; Bocca, L.; Sessarego, P.; De Martini, D.; Valenti, S.; Spaziante, R.; Giordano, G. (Genoa)

432 **Hexarelin, a Synthetic Growth-Hormone Releasing Peptide, Shows No Interaction with Corticotropin-Releasing Hormone and Vasopressin on Adrenocorticotropin and Cortisol Secretion in Humans**
Arvat, E.; Maccagno, B.; Ramunni, J.; Di Vito, L.; Broglio, F.; Deghenghi, R.; Camanni, F.; Ghigo, E. (Turin/Argenteuil)

383 **Announcement**
439 **Author Index Vol. 66, 1997**
441 **Subject Index Vol. 66, 1997**

KARGER

S. Karger
Medical and Scientific Publishers
Basel · Freiburg · Paris · London
New York · New Delhi · Bangkok
Singapore · Tokyo · Sydney

Drug Dosage
The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.
No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher or, in the case of photocopying, direct payment of a specified fee to the Copyright Clearance Center (see 'General Information').

© Copyright 1997 by S. Karger AG,
P.O. Box, CH–4009 Basel (Switzerland)
Printed in Switzerland on acid-free paper by
Reinhardt Druck, Basel